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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,425	12/20/1999	CHRISTOPH CAPELLARO	P99.2497	2302

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EXAMINER
PICH, PONNOREAY

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/446,425	CAPELLARO ET AL.
	Examiner	**Art Unit**	
	Ponnoreay Pich	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 June 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *28-62* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *29,41,43,45-49,52,54-57 and 60-62* is/are allowed.

6)☒ Claim(s) *28, 30-40, 42, 44, 50-51, 53, and 58-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/15/2006 has been entered.

Applicant's amendments and arguments were fully considered. Any rejections not repeated for record or specifically addressed are withdrawn due to applicant's amendments and/or arguments. Claims 28-62 are pending. Please also note new 101 rejections made in light of new 101 guidelines issued by the Office on October 2005.

Response to Arguments

Applicant's arguments were fully considered. The arguments directed at claims 28 and 30, which were not amended, were not found persuasive. As per claims 28 and 30, applicant argues that "subjecting the encoded message to at least one cryptographic process" requires that the "at least one cryptographic process" be applied to "the encoded message" not to a decoded message which is what happens in Wasilewski. The examiner respectfully maintains that though the interpretation of the limitation is broad, it is reasonable. "[A]t least one cryptographic process" is a broad term which can encompass also first decoding a message before applying encryption. In fact, the term can encompass any number of actions being done to be message as long as the message is also either encrypted or decrypted. It is noted that applicant's

amendments to other claims which add "without decoding the encoded message"

clarifies that the at least one cryptographic process is not meant to encompass first

decoding the message. The examiner's rejections over Wasilewski are withdrawn to

claims that such amendments were made. It is noted that newly added claims 61 and

62, which are dependent on claims 28 and 30 respectively, have similar limitations

which were amended onto other independent claims whose rejections over Wasilewski

have been withdrawn.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 39, 42, 50, 53, 40, 44, 51, and 58-59 are rejected under 35 U.S.C. 101

because the claimed invention is directed to non-statutory subject matter.

Claim 39:

Claim 39 is directed towards an apparatus comprising means which are

disclosed in the specification as being software means, i.e. software modules executing

on a proxy agent (PA1) as seen in Fig 1A. Claims directed towards software per se are

not statutory. Applicant can overcome the rejection by reciting at least one component

as part of the apparatus that is hardware.

Clams 42, 50, and 53:

Claims 42, 50, and 53 are dependent on claim 39 and also do not recite any

hardware as part of the claimed apparatus, thus are also not statutory since they are

directed towards software per se.

Claim 40:

Claim 40 is directed towards an apparatus comprising means which are

disclosed in the specification as being software means, i.e. software modules executing

on a proxy agent (PA2) as seen in Fig 1b. Claims directed towards software per se are

not statutory. Applicant can overcome the rejection by reciting at least one component

as part of the apparatus that is hardware.

Claims 44 and 51:

Claims 44 and 51 are dependent on claim 40 and also do not recited any

hardware as part of the claimed apparatus. Thus, they are also not statutory since they

are directed towards software per se.

Claim 58:

Claim 58 is directed towards a communication system having a manager of a

communication network, an intermediate manager of a communication network, and

including a software apparatus as recited in claim 39. One skilled should appreciate

that both the manager and intermediate manager can refer to software alone. Further,

though the claim states that the system employs a communication network (which is

hardware), this is not the same thing as the communication network being part of the

system. As such, it appears that claim 58 is directed towards software per se, which is

not statutory.

Claim 59:

Claim 59 is directed towards a communication system having a manager of a

communication network, an intermediate manager of a communication network, and

including a software apparatus as recited in claim 40. One skilled should appreciate

that both the manager and intermediate manager can refer to software alone. Further,

though the claim states that the system employs a communication network (which is

hardware), this is not the same thing as the communication network being part of the

system. As such, it appears that claim 59 is directed towards software per se, which is

not statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 28, 35, and 30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wasilewski et al (US 5,870,470) in view of Valizadeh et al (US

5,678,006).

Claim 28:

Wasilewski discloses a method for encoding a digital message, the method comprising:

1. Encoding the digital message by a first application to form an encoded message via employment of an encoding format of a network protocol (col 6, lines 19-26 and col 7, lines 12-15).

2. Subjecting the encoded message to at least one cryptographic process to form a cryptographically processed message (col 6, lines 19-26 and col 7, lines 29-37).

3. Encoding the cryptographically processed message via employment of the encoding format of the network protocol (col 6, lines 19-26 and col 7, lines 51-54).

Wasilewski does not explicitly disclose the method for encoding a digital message **on a computer**, the first application **executing on the computer**, and **a proxy agent application executing on the computer**.

However, the examiner notes that it is obvious and common practice to have encoding and cryptographic processing of digital messages done on a computer via some sort of application executing on the computer. One of ordinary skill would be motivated to do so as it is common practice in the art.

Further, Valizadeh discloses a proxy agent application executing on a computer (col 3, lines 22-29). Note also that Valizadeh explicitly discloses an agent can be an application (col 1, lines 56-59).

In light of the above, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified Wasilewski's invention according to the limitations recited in claim 28. One of ordinary skill would have been motivated to incorporate Valizadeh's teachings because he discloses that his teachings can simplify the development and maintenance of a network node (col 2, lines 27-31).

Claim 35:

Wasilewski does not explicitly disclose wherein the network protocol is a simple network management protocol version 1. However, Valizadeh discloses the network protocol is a simple network management protocol version 1 (col 3, lines 16-18). One of ordinary skill would be motivated to combine Wasilewski and Valizadeh's teachings for the same reasons given in claim 28.

Claim 30:

Wasilewski discloses a method for encoding a digital message, for transmitting the digital message from a first computer unit to a second computer unit and for decoding the digital message, the method comprising:

1. Encoding the digital message, by a first application, to form an encoded message via employment of an encoding format of the network protocol (col 6, lines 19-26 and col 7, lines 12-15).

2. Subjecting the encoded message to at least one first cryptographic process to form a cryptographically processed message (col 6, lines 19-26 and col 7, lines 29-37).

3. Encoding the cryptographically processed message via employment of the encoding format of the network protocol used to produce the encoded message to form an encoded, cryptographically processed message (col 6, lines 19-26 and col 7, lines 51-54).

4. Transmitting the encoded, cryptographically processed message from the first computer unit to the second computer unit (col 22, lines 62-65).

5. Decoding the encoded, cryptographically processed message, in the second computer unit, according to the encoding format of the network protocol to form a decoded, cryptographically processed message (col 5, lines 34-38 and col 23, lines 1-5).

6. Subjecting the decoded, cryptographically processed message to a second cryptographically process inverse relative to the at least one first cryptographically process to form an inversely cryptographically processed message (col 23, lines 9-23).

7. Decoding the inversely cryptographically processed message, by a second application in the second computer unit, into the digital message according to the encoding format of the network protocol (col 23, lines 24-32).

Wasilewski does not explicitly disclose the first application **in the first computer unit, a first proxy agent in the first computer unit**, the encoding is done **in the first computer unit**, and **a second proxy agent in the second computer unit**.

However, the examiner notes that it is obvious and common practice to have

encoding and cryptographic processing of digital messages done on a computer via

some sort of application executing on the computer. One of ordinary skill would be

motivated to do so as it is common practice in the art.

Further, Valizadeh discloses a proxy agent application executing on a computer

(col 3, lines 22-29). Note also that Valizadeh explicitly discloses an agent can be an

application (col 1, lines 56-59).

In light of the above, it would have been obvious to one of ordinary skill in the art

at the time the applicant's invention was made to have modified Wasilewski's invention

according to the limitations recited in claim 30. One of ordinary skill would have been

motivated to incorporate Valizadeh's teachings because he discloses that his teachings

can simplify the development and maintenance of a network node (col 2, lines 27-31).

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Wasilewski et al (US 5,870,470) in view of Valizadeh et al (US 5,678,006) in further

view of Pfaff (DE 19548387, translated document PTO 03-4961).

Claim 36:

Wasilewski and Valizadeh do not explicitly disclose forming a set request in the

first computer unit upon encoding the cryptographically processed message and

transmitting the set request from the first computer unit to the second computer unit.

However, Pfaff discloses forming a set request in the first computer unit upon encoding

the cryptographically processed message and transmitting the set request from the first

computer unit to the second computer unit (Fig 4). It would have been obvious to one of

ordinary skill in the art to incorporate Pfaff's teachings into the combination invention of

Wasilewski and Valizadeh according to the limitations recited in claim 36. One of

ordinary skill would have been motivated to do so as Pfaff discloses his teachings would

allow for the common use of a Standard Single-User Application environments that can

be located in different places (page 1, paragraph 2, last 3 lines).

Claims 31-34 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Wasilewski et al (US 5,870,470) in view of Valizadeh et al (US 5,678,006) in further

view of Fujino et al (US 5,651,006).

Claim 31:

Wasilewski and Valizadeh do not explicitly disclose including a request for

implementing a prescribable action in the digital message, implementing the

prescribable action in the second computer unit to obtain a result of the prescribable

action, and sending the result of the prescribable action from the second computer unit

to the first computer unit in a reply message. However, the above limitations are met by

Fujino (col 6, lines 51-67; col 7, lines 1-12; Fig 2; and Fig 3). In light of this, it would

have been obvious to one of ordinary skill in the art to have modified the combination

invention of Wasilewski and Valizadeh according to the limitations recited in claim 31.

One of ordinary skill would have been motivated to incorporate Fujino's teachings as

Fujino discloses that his teachings would allow for managing a large-scale

communication network (col 2, lines 48-50).

Claim 32:

Wasilewski discloses:

1. Encoding a message to form an encoded message according to the encoding

   format of the network protocol to form an encoded message (col 6, lines 19-26

   and col 7, lines 12-15).

2. Subjecting the encoded message to at least one cryptographic process to form a

   cryptographically processed message (col 6, lines 19-26 and col 7, lines 29-37).

3. Encoding the cryptographically processed message according to the encoding

   format of the network protocol to form an encoded, cryptographically processed

   message (col 6, lines 19-26 and col 7, lines 51-54).

4. Transmitting the encoded, cryptographically processed message (col 22, lines

   62-65).

5. The encoded, cryptographically processed, and encoded message being a reply

   message, i.e. in response to a customer's request (col 3, line 42-col 4, line 11).

   Wasilewski does not explicitly disclose:

1. Including a request for implementing a prescribable action in the digital message.

2. Implementing the prescribable action in the second computer unit to obtain a result of the prescribable action.

3. Forming a reply message which contains the result of the prescribable action in the second computer.

4. The encodings and cryptographic processing for the reply message being done in the second computer unit to for the reply message.

5. Storing the cryptographically processed reply message in the second computer unit.

6. The transmitted message being the reply message from the second computer unit to the first computer unit.

However, Fujino discloses including a request for implementing a prescribable action in the digital message; implementing the prescribable action in the second computer unit to obtain a result of the prescribable action; forming a reply message which contains the result of the prescribable action in the second computer unit (col 6, lines 51-67; col 7, lines 1-12; Fig 2; and Fig 3). One of ordinary skill would be motivated to incorporate Fujino's teachings for the same reasons given in claim 31.

Further, two-way communications between two computers are well known. For a computer to send a reply message to another computer, it must first form and store that reply message. It is also well known for the replying second computer to use the same encoding/encryption protocol to reply to the first computer. One of ordinary skill would

be motivated to use the same encoding and encryption protocol for a second computer

to reply to a first computer as it is common practice to have two communicating

computers use the same communication protocol and to have a uniform security policy

between the two computers.

In light of the above, it would have been obvious to one of ordinary skill in the art

at the time the applicant's invention was made to have modified Wasilewski and

Valizadeh combination invention according to the limitations recited in claim 32. One of

ordinary skill would be motivated to do so for the reasons given above.

Claim 33:

All of the limitations recited in claim 33 can be found in claim 32 also. As such,

the same reasons used to reject claim 32 also applies to claim 33.

Claim 34:

Wasilewski does not disclose wherein the cryptographically processed reply

message is stored in a management information base in the second computer unit.

However, this limitation is obvious to the combination invention of Wasilewski,

Valizadeh, and Fujino as Fujino discloses the limitation (col 3, lines 19-23).

Claim 38:

Wasilewski does not disclose transmitting as the prescribable action at least one

of an information query and an information indication of the second computer unit.

However, this limitation is obvious to the combination invention of Wasilewski,

Valizadeh, and Fujino as Fujino meets this limitation (col 6, lines 51-67 and col 7, lines

1-12).

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Wasilewski et al (US 5,870,470) in view of Valizadeh et al (US 5,678,006) in further

view of Fujino et al (US 5,651,006) and Pfaff (DE 19548387, translated document PTO

03-4961).

Claim 37:

Wasilewski, Valizadeh, and Fujino do not explicitly disclose employing a get

request as the fetch message and forming a get response upon the encoding of the

requested, cryptographically processed reply message. However, this limitation is

obvious to the combination invention of Wasilewski, Valizadeh, and Fujino as the

combination invention uses SNMP (see Valizadeh: col 3, lines 22-29 and Fujino: col 3,

lines 24-27), which uses a get request and forms a get response. The limitation is also

disclosed by Pfaff (Fig 4). It would have been obvious to one of ordinary skill to have

modified the combination invention of Wasilewski, Valizadeh, and Fujino according to

the limitation recited in claim 37 even if the limitation wasn't implicit to the combination

invention in light of Pfaff's teachings. One of ordinary skills would have been motivated

to incorporate Pfaff's teachings for the same reason given in claim 36.

Allowable Subject Matter

Claims 29, 41, 43, 45-49, 52, 54-57, and 60-62 allowed.

Claims 39, 42, 50, 53, 40, 44, 51, 58, and 59 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 9:00am-4:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.
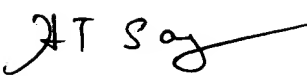
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